



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS '. P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/524,971		03/14/2000	David B Parlour	X-607 US	8836
24309	7590	03/08/2004		EXAMINER	
XILINX, IN			LIPMAN, JACOB		
ATTN: LEGAL DEPARTMENT 2100 LOGIC DR			ART UNIT	PAPER NUMBER	
SAN JOSE, CA 95124				2134	77)
				DATE MAILED: 03/08/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Commons		09/524,971	PARLOUR ET AL.			
•	Office Action Summary	Examiner	Art Unit			
		Jacob Lipman	2134			
Period fo	The MAILING DATE of this communication ap or Reply	opears on the cover sheet with the c	corresponaence address			
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a report of for reply is specified above, the maximum statutory perion reto reply within the set or extended period for reply will, by staturely received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tirply within the statutory minimum of thirty (30) day d will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	nely filed s will be considered timely. I the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>05</u>	January 2004.				
2a)□	This action is FINAL . 2b)⊠ Th	is action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
5)⊠ 6)⊠ 7)□ 8)□ Applicat 9)□	Claim(s) 1-29 is/are pending in the application 4a) Of the above claim(s) is/are withdred claim(s) 22-28 is/are allowed. Claim(s) 1-21 and 29 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and sion Papers The specification is objected to by the Examination The drawing(s) filed on is/are: a) are applicant may not request that any objection to the	rawn from consideration. /or election requirement. ner. ccepted or b) □ objected to by the				
11)□	Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the I	ection is required if the drawing(s) is ob	pjected to. See 37 CFR 1.121(d).			
Priority (under 35 U.S.C. § 119					
a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority application from the International Bure See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat iority documents have been receive au (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachmen		4) 🔲 Interview Summary	(PTO.413)			
2) Notice 3) Infor	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 er No(s)/Mail Date	Paper No(s)/Mail D				

Application/Control Number: 09/524,971 Page 2

Art Unit: 2134

DETAILED ACTION

Drawings

1. The drawings corrections were received on 1/5/2004. These corrections are acceptable.

Specification

2. The specification corrections were received on 1/5/2004. These corrections are acceptable.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 4. Claim 20 is rejected under 35 U.S.C. 102(a) as being anticipated by Erickson et al., US Patent number 5,970,142.

With regard to claim 20, Erickson discloses a PLD (column 1 line 63), which is inherently non-volatile, that receives an encrypted configuration bit stream (column 1 line 66-column 2 line 1), including a key (column 1 lines 63), a decryptor that decrypts a part of the bit stream using the key (column 2 lines 1-3), and configures elements with the configuration data from the bit stream (column2 lines 4-5).

With regard to claim 21, encrypted data inherently has indication of what key was used to encrypt it, since it can be decrypted with that key.

Claim Rejections - 35 USC § 103

Application/Control Number: 09/524,971 Page 3

Art Unit: 2134

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson.

With regard to claims 1, and 2, Erickson discloses a method of configuring a PLD with an encrypted bit stream as outlined above. Erickson does not disclose using a unique private key to decrypt an encrypted key to decrypt the bit stream, but mentions generating a key. The examiner takes official notice that public/private key encryption is often used to transmit session keys. It would have been obvious for one of ordinary skill in the art to send an encrypted key to the PLD, rather than have the PLD create it's own key, so each PLD wouldn't need to have it's own random number generator, thus lowering costs, which Erickson teaches to be desirable (column 7 lines 42-43).

With regard to claim 3, encrypted data inherently has indication of what key was used to encrypt it, since it can be decrypted with that key.

With regard to claims 4 and 5, inherent to public/private key encryption is that the key would have to be stored.

With regard to claim 6, Erickson discloses a decryptor on the PLD (column 7 lines 36-37).

With regard to claims 7, 8, and 9, Erickson discloses sending a second bit stream with a second key (column 2 lines 9-17).

With regard to claims 11-16, the examiner takes official notice that these are obvious variations of Erickson's invention as disclosed above, would have been obvious to one of ordinary skill in the art, and will not be addressed individually.

With regard to claim 17, the examiner takes official notice that licenses are common in computers to prevent piracy. It would have been obvious to one of ordinary skill in the art to require PLD users to acquire a license before configuring the PLD, the motivation being to prevent piracy and increase sales.

7. Claims 10, 19, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Redman et al., US Patent number 5,987,476 in view of Erickson.

With regard to claims 10 and 19, Redman discloses a PLD to realize an IP module (column 2 lines 29-59). Redman does not disclose configuring the PLD with an encrypted bit stream. Erickson teaches configuring a PLD with an encrypted bit stream, as outlined above. It would have been obvious to one of ordinary skill in the art to configure Redman's PLD with Erickson's encrypted bit stream, for the motivation of controlling how the PLD can be configured.

With regard to claim 29, Erickson discloses sending a second bit stream with a second key (column 2 lines 9-17).

Allowable Subject Matter

8. Claims 22-28 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Lipman whose telephone number is 703-305-

Application/Control Number: 09/524,971

Art Unit: 2134

0716. The examiner can normally be reached on 7:30 - 5 M-Th, and alternating

Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JL

GREGORY MORSE

Page 5

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100